CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	**Bynum / Teton County Water and Sewer District** **Land Use License / Easement for municipal water supply wells and pipeline**
Proposed Implementation Date:	August 1, 2011
Proponent:	Bynum / Teton County Water and Sewer District PO Box 804 Bynum, MT 59419
Location:	Sec 16, T25N, R5W Sec. 36, T26N, R6W
County:	Teton

I. TYPE AND PURPOSE OF ACTION

Bynum / Teton County Water and Sewer District has applied for a Land Use License to install 2 water wells, a well house and a transmission pipeline to supply the City of Bynum with a municipal water supply. The proposed project will consist of installing 2 new production wells (one primary and one back-up), 3" HDPE piping between the wells, construction a well house, and installing a 4" HDPE transmission pipeline connecting to a storage tank near Bynum.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

Great West Engineering, Helena, Montana
Department of Natural Resources and Conservation (DNRC) – (Trust Lands, Water Resources)
Department of Commerce – Treasure State Endowment Program
Army Core of Engineers – 595 Grant
Bynum / Teton County Water and Sewer District
US Bureau of Reclamation (US BOR)
Montana Fish Wildlife and Parks
6 – Adjacent land owners
Surface Lessee
Public Scoping notice published in the Choteau Acantha May 4, 2011 and May 11, 2011.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

The water well production will be under the 35 gallons per minute and/or 10 acre feet and will be exempt from further DNRC permits (water use permit). The applicant will have to file for a ground water certificate after the well is completed. Although this system will be engineered and built to full capacity , which will exceed the 35 gallons per minute and 10 acre feet, it is the city of Bynum's full intention to monitored and meter all water usage to ensure that these thresholds are not passed. If at any time in the future the thresholds are surpassed, then the City of Bynum would be responsible to secure a DNRC water use permit.

3. ALTERNATIVES CONSIDERED:

Alternative A (No Action) – DNRC does not issue the proposed Land Use License.

Alternative B (the Proposed action) – DNRC issues the proposed Land Use License.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Soils are suitable for well drilling and pipelines. Bynum has drilled test wells in this area and they passed for municipal supply. Existing access road will be used along the pipeline corridor. 3 culverts will be installed across coulees and ditches to minimize soil erosion. Soil erosion control measure will be implemented as needed throughout the project area. No other fragile or unstable soils present in the area of the proposed area. All disturbed areas will be regarded and reseeded with native vegetation. Pipeline corridors will be monitored for noxious weeds and controlled appropriately. No long term or cumulative impacts to soil erosion and /or other soil resources are expected.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

Erosion control practices will be implemented throughout the project area. Culverts will be installed in coulees and ditches to protect water quality. Road improvements will be held to a minimum to minimize sediment movement to water ways.

Two municipal quality wells will be drilled, one will be used as the primary water source for the City of Bynum and the other well will be used as a backup. Water usage is expected to be less than 35 gallons per minute and 10 acre feet. Volumes will be metered to ensure that this threshold is not passed and ground water resources are not depleted. Therefore, a DNRC water use permit is not needed, and a ground water certificate can be acquired after drilling. No other important surface or groundwater resources will be impacted by the proposed activity. No cumulative effects to the water resources are anticipated.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

No effects to air quality will occur. No cumulative effects to air quality are anticipated

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

There are no rare plants or cover types present in the project area. Current land use in the project area is grazing land (native rangeland). The majority of the proposed action will be utilizing existing roads. Temporary disturbances are expected from the well drilling activities, manipulation of vehicles and heavy equipment on the surface, and installing the buried pipelines. All disturbed areas will be reclaimed to pre-existing conditions and grazing land will be reseeded with noxious weed seed free native seed. Noxious weed monitoring and/or control associated with the proposed project will be the applicant's responsibility. No long term impacts to the existing vegetation are expected.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

These tracts provide habitat for a variety of big game species (mule deer, whitetail deer, pronghorn antelope), predators (coyote, fox, badger), upland game birds (sharp tail grouse, Hungarian partridge, pheasant), other non-game mammals, raptors and various songbirds. Temporary displacement of wildlife during construction activities (well drilling and pipeline installation) is likely to occur. However, the proposed action does not include any land use change which would yield significant changes to the wildlife habitat. The proposed action will not impact wildlife forage, cover, or traveling corridors. Nor will this action change the juxtaposition of wildlife forage, water, or hiding and thermal cover. There are no unique or critical wildlife habitats associated with the state tracts and do not expect direct or cumulative wildlife impacts would occur as a result of implementing the proposal. The proposed action will not have long-term negative effects on existing wildlife species and/or wildlife habitat because of its relatively small scale.

Montana FWP was contacted regarding wildlife comments on this project. An onsite field review was also completed in May 2011 with Gary Olson (FWP Area Wildlife Biologist). FWP did not provide any written comments regarding the project. Subsequent conversations with Mr. Olson indicated that he did not have any concerns with this project from a wildlife perspective.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:
Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Sec 16 contains several hundred acres of silver buffalo berry (Shepherdia argentea). This shrub dominated thicket area provides food and cover for grizzly bears in the fall (late August to November). Grizzly bears are known to use this area in the fall and Bear human conflicts have occurred on this tract. The well sites are located approximately 500 feet away from the silver buffalo berry edge and the buried pipeline is located 100 feet away from the edge at its closest point.

Montana FWP was contacted regarding wildlife comments on this project. An onsite field review was also completed in May 2011 with Gary Olson (FWP Area Wildlife Biologist). FWP did not provide any written comments regarding the project. Subsequent conversations with Mr. Olson indicated that he did not have major concerns with this project from a wildlife perspective. He acknowledged that this tract has high grizzly bear use, particularly in the fall. Because the well sites were located well away (500 feet) from the shrub thicket edge, direct impact to grizzly bears was unlikely. Also, this tract is surrounded by rural and agricultural use (ranch buildings, irrigation diversions, irrigation, haying, farming, cattle movement, weed spraying, ect.) and the grizzly bears are somewhat used to human activities in the area. The proposed action may temporary displace some animals in the area, but these impacts are very small and minor and no long tern impact will occur.

The proposal does not include any activities which would alter any habitat, therefore no long term impacts to grizzly bears and/or grizzly bear habitat are expected. No other threatened or endangered species are known to exist in this area.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

On May 11, 2011, the DNRC staff archaeologist conducted a Class III inventory of the area of potential effect of the proposed Bynum/Teton County Water System Improvements as it relates to two parcels of state land in Teton County (Section 16, T25N R5W and Section 36, T26N R6W). Two cultural resources (two irrigation ditches more than 50 years old) were identified and will formally recorded. The proposed action will have No Effect to state owned Heritage Properties.

No historical, cultural or paleontological artifacts or resources will be impacted as a result of this project.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The proposed action will slightly impact the aesthetic of the landscape. 2 wells and a well house will be visible, while the pipeline will be buried below ground. These types of infrastructure are similar to adjacent lands. The state land is in a remote area and does not provide any unique scenic qualities not also provided on adjacent private lands.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

No demands on limited resources are required for this project.

No direct or cumulative effects to environmental resources are anticipated.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

The US Bureau of Reclamation and US Army Core of Engineers are in the process of completing an EA (NEPA) for this project.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

The proposed project will provide safe and reliable drinking water to the citizens of Bynum.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

Construction activities will cause small scale and temporary damage to grazing lands, but will not greatly impact surface use in the long term. The applicant has agreed to provide the state of Montana (and our surface lessee) access to the water for livestock and other commercial activities. Initially, Bynum will provide a hydrant located on state land for livestock watering purposes. Livestock water will be an improvement to the state land for future management purposes. The proponent has developed a surface damages payment process to compensate surface lessees for actual damages.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

This project will be built by local private contractors. Cumulative effects to state and local employment are expected to be very positive.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

The proposed action will provide tax revenues to local counties and the State of Montana.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

There will be no direct or cumulative effects on government services.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

There are no zoning or other agency management plans affecting these lands.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

There is no wilderness or recreational areas or access to wilderness or recreational areas through these tracts. The proposed action is not expected to create conflict to any general recreational activities within the area.

There will be no direct or cumulative effects on recreational or wilderness activities.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

Local communities are expected to welcome contractors for this project. The proposal does not include any changes to housing or developments. No direct or cumulative effects to population or housing are anticipated.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

There are no native, unique or traditional lifestyles or communities in the vicinity that would be impacted by the proposal.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

The proposed project will have no effect on any unique quality of the area.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Bynum has secured a pipeline easement from the adjacent land owner (Ralston Gap Cattle Company).

DNRC – Conrad Unit Office sent out 9 scoping letters for this project. Scoping notices were sent to adjacent land owners and Montana FWP. DNRC also publish a public scoping notice in the Choteau Acantha for 2 weeks. DNRC received 2 comments as listed below.

1. Kirk and Rusyl Klingaman – "we are in favor of this project and feel that thus would be of great benefit to the Bynum community, Bynum school district, and Teton County.
2. Teton County Commissioners - "Teton County Commissioners support this project"

The City of Bynum has received the following funding grants to help build this municipal water system.

1. Treasure State Endowment Program grant - $750,000.00
2. Army Cory Of Engineers 595 grant (ARRA) - $860,000.00
3. US Bureau of Reclamation grant - $70,000.00

Initially, the school trust will receive fair compensation for a Land Use License for installation of the infrastructure on state land. Subsequently, the school trust will receive a one-time easement fee for the land associated with the pipeline and well sites. A valve will be installed on site to allow use of the facility for stock watering on state land. In addition, a perpetual fee for water leaving state land will be negotiated.

EA Checklist Prepared By:	**Name:**	Erik Eneboe
	Title:	Conrad Unit Manager, CLO
Signature: 		**Date**: July 12, 2011

V. FINDING

25. ALTERNATIVE SELECTED:

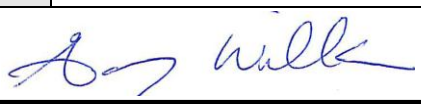
I have selected Alternative B, issue a Land Use License to allow drilling of the wells, construction of the pumping facilities and pipeline.

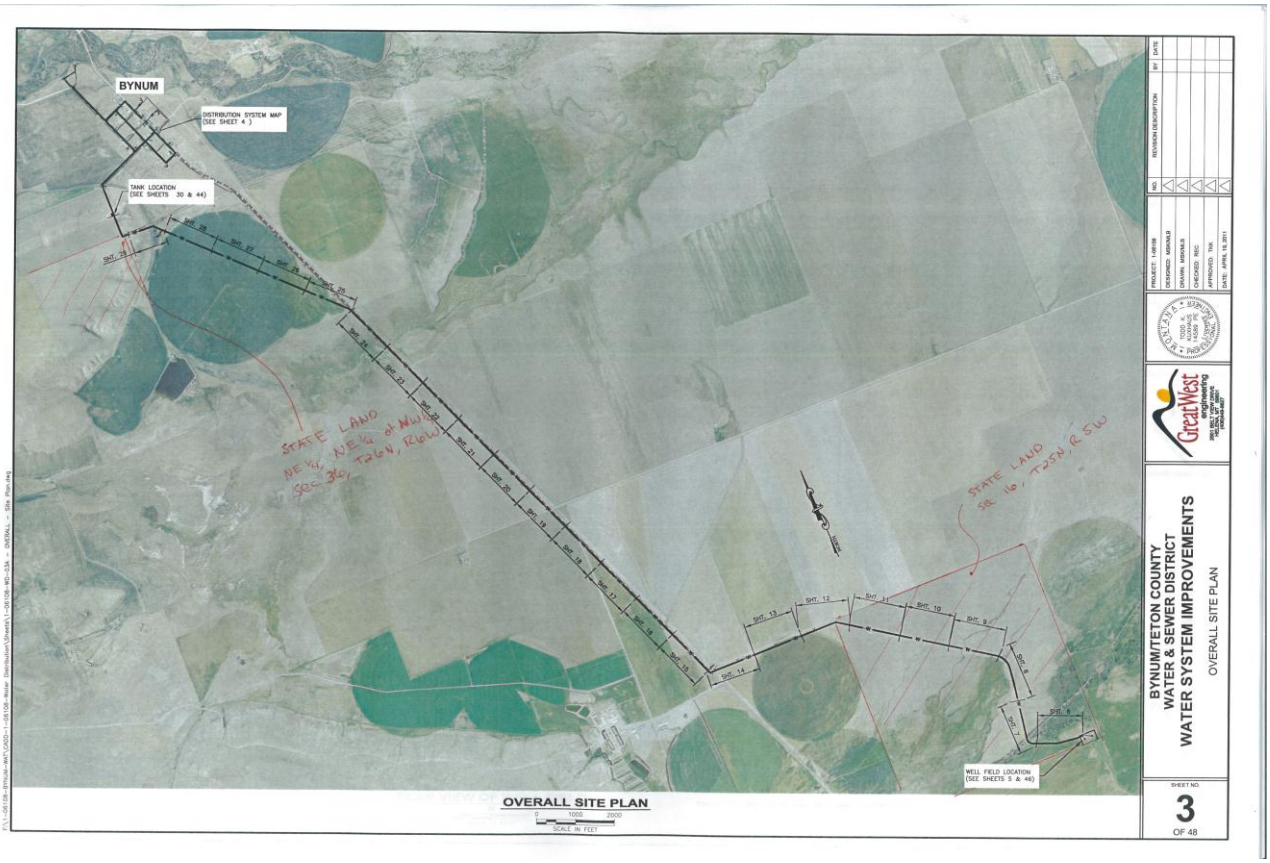
26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Significant impacts are not anticipated as a result of the proposed project. Environmental Impacts associated with the proposal are expected to be minor and short term. The project site is located in close proximity to development and ongoing similar farming/ranching activities. The project will provide an improved water supply system to the Town of Bynum.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

[ ]	EIS	[ ]	More Detailed EA	[X]	No Further Analysis

EA Checklist Approved By:	**Name:**	Garry Williams
	Title:	Area Manger, CLO
Signature:		**Date**: 8/9/2011


BYNUM
DISTRIBUTION SYSTEM MAP (SEE SHEET 4)
TANK LOCATION (SEE SHEETS 30 & 44)
STATE LAND NE¼, NE¼ of NW¼ SEC. 36, T26N, R6W
STATE LAND SEC. 16, T25N, R5W
WELL FIELD LOCATION (SEE SHEETS 5 & 46)
OVERALL SITE PLAN
0 1000 2000
SCALE IN FEET
BYNUM/TETON COUNTY
WATER & SEWER DISTRICT
WATER SYSTEM IMPROVEMENTS
OVERALL SITE PLAN
SHEET NO.
3
OF 48